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ABSTRACT

This monograph addresses assessment of students entering two-year colleges. In her introduction to the monograph, Luene Corwin provides an overview of various assessment models in existence. Assessment systems currently in use are discussed in the following papers: "Assessment at Guilford Technical Community College," by Paula Garber; "Testing at the Meramec Campus of St. Louis Community College," by Jack J. Becherer; and "Florida's Statewide Mandate to Test New Students," by Luther B. Christofoli. Appendixes to the volume include a discussion of the assessment and placement program at St. Louis Community College at Meramec, a detailed description of the procedures and instruments used in the entry assessment and placement system for college credit for students at Florida Community College at Jacksonville, and a list of member institutions of the National Alliance of Community and Technical Colleges. A list of selected readings is also included. (MN)

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FOREWORD

Increasingly, community, technical, and junior colleges rely on assessment of incoming students to ensure proper placement either in college-level or developmental programs. In addition, assessment of new students is vitally important before selection of a major program of study. Intake assessment is also being coupled more effectively with program completion assessment to determine changes in student knowledge, attitudes, and performance resulting from educational experiences, thereby measuring the value added by an associate degree program.

Assessing Students' Skills and Interests reports on intake assessment approaches at three member institutions of the National Alliance of Community and Technical Colleges: Florida Community College at Jacksonville, Florida; Guilford Technical Community College, Jamestown, North Carolina; and St. Louis Community College, St. Louis, Missouri. A forum, convened on April 16, 1986, brought Alliance members together to share and discuss their strategies and concerns about intake assessment. This monograph summarizes that forum. This report should be useful to all 2-year college administrators and faculty interested in alternative approaches to intake assessment at their own institutions.

The National Center and the National Alliance of Community and Technical Colleges (formerly the National Postsecondary Alliance) wish to thank the following participants for contributing to the report: Luene Corwin, Manchester Community College; Luther B. Christofoli, Florida Community College at Jacksonville; Paula Garber, Guilford Technical Community College; and Jack J. Becherer, St. Louis Community College. In addition, the National Center wishes to acknowledge the leadership to this effort by Dr. Robert E. Taylor, recently retired Executive Director. James P. Long, Director of the National Alliance of Community and Technical Colleges and Senior Research Specialist at the National Center, guided the development of this report, under the supervision of Harry N. Drier, Associate Director. Constance R. Faddis of the National Center provided substantive editing. Margaret Barbee provided clerical support. Copy editing was performed by Judy Balogh of the National Center's Editorial Services.

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EXECUTIVE SUMMARY

This monograph presents a forum on assessment of new students entering 2-year colleges. The major purposes of such assessment are to (1) ascertain students' readiness for college-level study and (2) determine the students' proper placement in programs (including the option of remediation courses for basic skills).

The monograph is based on a forum held by the National Alliance of Community and Technical Colleges, a consortium of 2-year postsecondary institutions around the nation. Assessment and placement models of three different 2-year colleges are presented.

The first model is in use at Guilford Technical Community College (GTCC) in Greensboro, North Carolina. GTCC's mandatory assessment and placement program has been in place for 20 years. Two years ago, GTCC redesigned its overall assessment program to match the college's change to competency-based education in the curricula. The new model involves four components: (1) basic skills assessment and intervention (where appropriate), continuing on through (2) entry into the occupational program, (3) participation and movement in the instructional sequence, and (4) program exit and evaluation. Each component gauges specific competencies needed at that level.

GTCC developed a set of specific competency statements describing basic skills required by incoming students. To measure entry-level reading, grammar, writing, and math, GTCC uses standardized tests developed by the Educational Testing Service. The college hopes eventually to develop its own criterion-referenced tests. GTCC has also developed a number of assessment and placement procedures and materials that greatly facilitate the assessment process for both students and staff.

The second model is in use at the Meramec campus of St. Louis Community College (SLCC). SLCC recently made its intake assessment program mandatory for all regular and appropriate part-time students. Students whose scores show they are not ready for college-level work are now required to take developmental (i.e., remedial) studies. This policy has not frightened students away from the college and has actually increased enrollment in the basic skills courses.

SLCC uses the Assessment and Placement Services for Community Colleges (APSCC) instrument, which is a College Board test, for reading and writing intake assessment. This test provides separate norms for community college students. An in-house writing sample may also be used. For math assessment, SLCC uses a math placement instrument developed by DeKalb Community College in Georgia. For students planning to pursue advanced math courses, SLCC uses the Calculus Readiness Test developed by the Mathematical Association of America. The college also evaluates high school course work, class rank, and other indicators to determine the most appropriate placement for new students.

A plan to ensure effective assessment and placement has been implemented at SLCC. Institutional tasks for achieving this goal include (1) convincing students, through mandatory advising and placement, of the necessity of developmental courses (where appropriate) and prerequisites; (2) ensuring that developmental courses offer quality, effective basic skills training; (3) providing

enough institutional support, through advising, faculty monitoring of student performance, learning labs, tutoring programs, and the like, to create an environment that favors student success; and (4) ensuring that the intake and assessment system is accountable by updating continually SLCC-based norms for each of its placement tests, by sending monthly honors (and other appropriate) lists around campus, by monitoring the progress of selected groups, by publishing an annual placement/testing profile of the entire student body, and by conducting cooperative assessment research projects.

The third model, in use at the Florida Community College at Jacksonville (FCCJ), is mandatory for all 2- and 4-year state colleges in Florida. The state-mandated assessment occurs at two levels: (1) for students first coming into a 2- or 4-year college and (2) for students moving from the college sophomore (grade 14) to the college junior (grade 15) status, whether transferring from a 2-year college or simply advancing a grade at a 4-year college.

The mandated assessment for entry to college (grade 13) requires every state postsecondary institution to use one of four sets of tests, as follows:

- American College Testing (ACT) Assessment; American College Testing Program
- Assessment of Skills for Successful Entry and Testing (ASSET); American College Testing Program
- Scholastic Achievement Test (SAT); College Entrance Examination Board
- Multiple Assessment Program and Services (MAPS); College Entrance Examination Board

In Florida the colleges must use the cutoff scores mandated by the state. Under the mandate, students taking college preparatory (i.e., remedial) courses no longer receive credit toward a degree for those courses.

FCCJ uses Florida MAPS, a specially tailored version of MAPS. For noncredit vocational courses, FCCJ uses the Test of Adult Basic Education (TABE). In addition, FCCJ uses an admissions counseling profile, which gathers self-reported information about an incoming student's background.

The assessment performed between grades 14 and 15 evaluates a set of 112 competencies considered essential for success in the completion of a 4-year degree. The assessment instrument, the College Level Academic Skills Test (CLAST), consists of math, reading, and grammar and usage subtests, as well as a written essay. Students must attain a state-mandated minimum score to pass.

Test scores and information from the admissions counseling profile are fed into FCCJ's computerized registration system. The computer then prints out a basic prescription for the student, calling for placement in either developmental or college-level courses. Students are prevented from registering for courses for which they are not considered ready. This system helps ensure the accountability of FCCJ's assessment and placement process.

INTRODUCTION

by Luene Corwin

This monograph focuses on assessment of new students entering a 2-year college and is an activity of the National Alliance of Community and Technical Colleges, which sponsors a variety of forums on topics of interest to the postsecondary community. The National Alliance of Community and Technical Colleges is a nationwide consortium of community colleges, technical institutes, junior colleges, and vocational-technical schools dedicated to promoting excellence in occupational education through mutual cooperation. Membership currently includes 82 colleges from 42 separate institutions in 21 states. The Alliance is affiliated with the National Center for Research in Vocational Education at The Ohio State University.

Each year, the Alliance selects major themes for emphasis at its semiannual meetings, in its newsletters and publications, at its forums, in its grant proposals, and in other relevant work. In the past, such themes have included using high technology, phasing out a program, and evaluating and revising occupational programs. Forums on these themes have typically been documented as monographs, such as the following:

- *Preparing for High Technology: A Guide for Community Colleges* (Long and Warmbrod 1981)
- *How to Phase Out a Program* (Long, Minugh, and Gordon 1983)
- *Economic Development and the Community College* (Long, Gordon, Spence, and Mohr 1984)
- *Evaluating and Revising Occupational Programs* (Corwin, Minnaert, Martinez, and Lemoine 1986)

The Alliance theme for 1985-86 was assessment, an issue now at the forefront of national focus. Of particular interest to Alliance members was the assessment of entering students as it relates to student success. This is the issue considered in this publication.

Assessment of entering students first became a concern for 2-year colleges as a means of ensuring that our open doors do not become revolving doors. The major purposes of intake assessment are, therefore, (1) to ascertain students' readiness for college-level study and (2) to determine appropriate placement in programs. Assessment also helps determine when students require some kind of remediation to prepare them for college-level work.

The following sections discuss assessment models in operation at 2-year colleges in North Carolina, Missouri, and Florida. The first two models were initiated by the particular institutions in which they now operate. Differences in the models are based on differing educational philosophies and instructional strategies at the two institutions.

The third model (Florida) responds to a statewide mandate for assessment at 2-year colleges. Many other states are moving in this direction. Voluntary assessment, as in the first two models, is generally an outgrowth of appeals for help from students who find themselves floundering in college classrooms. The rationale for state-mandated assessment, on the other hand, tends to evolve out of concerns about academic quality and accountability.

The state in which I recently worked, New Jersey, has adopted state-mandated assessment. Under the requirements, all college 2 students—full-time and part-time—must be tested. Students whose assessment scores are unsatisfactory must take remediation before entering the college-level courses. The premise is that students who cannot contribute to classroom discussions at a college level will pull down the educational level of that class; alternatively, teachers will be tempted to teach at the level of the lowest common denominator. The mandated assessment and consequent remedial courses for low-scoring students are meant to ensure that all students in postsecondary programs are functioning at an appropriate level to maintain high standards of education. This philosophy and approach are becoming more widespread.

In addition to their differing origins and philosophies, the three models reported in this publication also deal with differing phases of development in their assessment systems. Guilford Technical Community College in North Carolina has had its assessment system in place for 20 years, but only recently has the college begun to develop a competency-based assessment model in response to a collegewide implementation of competency-based curricula. The assessment system at St. Louis Community College in Missouri has likewise been in place for some years, but last year the college began a complete revamping of its testing program in response to declining assessment test scores, particularly in mathematics. Finally, Florida Community College at Jacksonville is implementing an assessment approach developed for use at all of the state's 2-year colleges, is using the resulting scores to place students in remedial or college-level programs, and is 3 providing computerized assessment information to program advisors at the college.

The National Alliance of Community and Technical Colleges is grateful to the authors of the following sections of this monograph.

ASSESSMENT AT GUILFORD TECHNICAL COMMUNITY COLLEGE

by Paula Garber

Guilford Technical Community College (GTCC) is the third largest of fifty-eight 2-year colleges in the North Carolina system. The college serves approximately 20,000 students per quarter, 6,500 of them full-time students taking both credit and noncredit courses.

For the 20 years it has been in existence, GTCC has had a mandatory assessment and placement program for entering students. All full-time degree-seeking students are given a full battery of tests upon entry. Students with Scholastic Achievement Test scores above a certain level or those entering GTCC by transfer credit from other schools may have the intake assessment tests waived, but the majority of entering students take the tests. Students are then placed in either developmental (i.e., remedial) studies or into the college curriculum programs, depending on their test outcomes.

Two years ago (1984), GTCC began implementing competency- based education in the curricula. Naturally, identification of competencies implies the need to measure them, and it became clear that assessment would play an integral role in the process. In response to this need, GTCC developed a competency-based assessment model (see figure 1).

As the model shows, the assessment program involved four components beginning with (1) basic skills assessment and intervention (where appropriate) and continuing on through (2) entry into the occupational program, (3) participation and movement in the instructional sequence, and (4) program exit and evaluation. Assessment is part of a student's career at GTCC, from entry until exit. Each assessment component gauges specific competencies needed at that level. Students who have not achieved the appropriate minimum competencies then receive intervention to help them develop those competencies before passing on to the next level.

As GTCC developed the competency lists and standards for its curricula, the lack of specifically stated entry-level competencies became apparent. Clearly, entry-level competencies would have to include English, reading, and math, but no process existed for identifying them, let alone for sharing them with students who wanted to enter GTCC programs. To develop these competencies, GTCC turned to a process usually used to develop exit-level competencies for GTCC occupational programs. The process, DACUM (**D**eveloping **A** **C**urricul**um**), is a method of occupational analysis by which a panel of experienced workers in a given occupation spends 2 days (or more) with a trained DACUM facilitator to analyze tasks performed on the specified job and to agree on the competencies required to perform the job tasks.

GTCC adapted the DACUM process by convening a panel of campus instructors in curriculum programs from various areas. The assumption was that these instructors would know best what basic skills students needed when entering college-level programs. The adapted DACUM process resulted in a set of very specific competency statements describing the basic skills GTCC needed to measure for all entering students. Figure 2 shows the chart of entry-level competencies developed by the adapted DACUM panel.

GTCC

Guilford Technical Community College

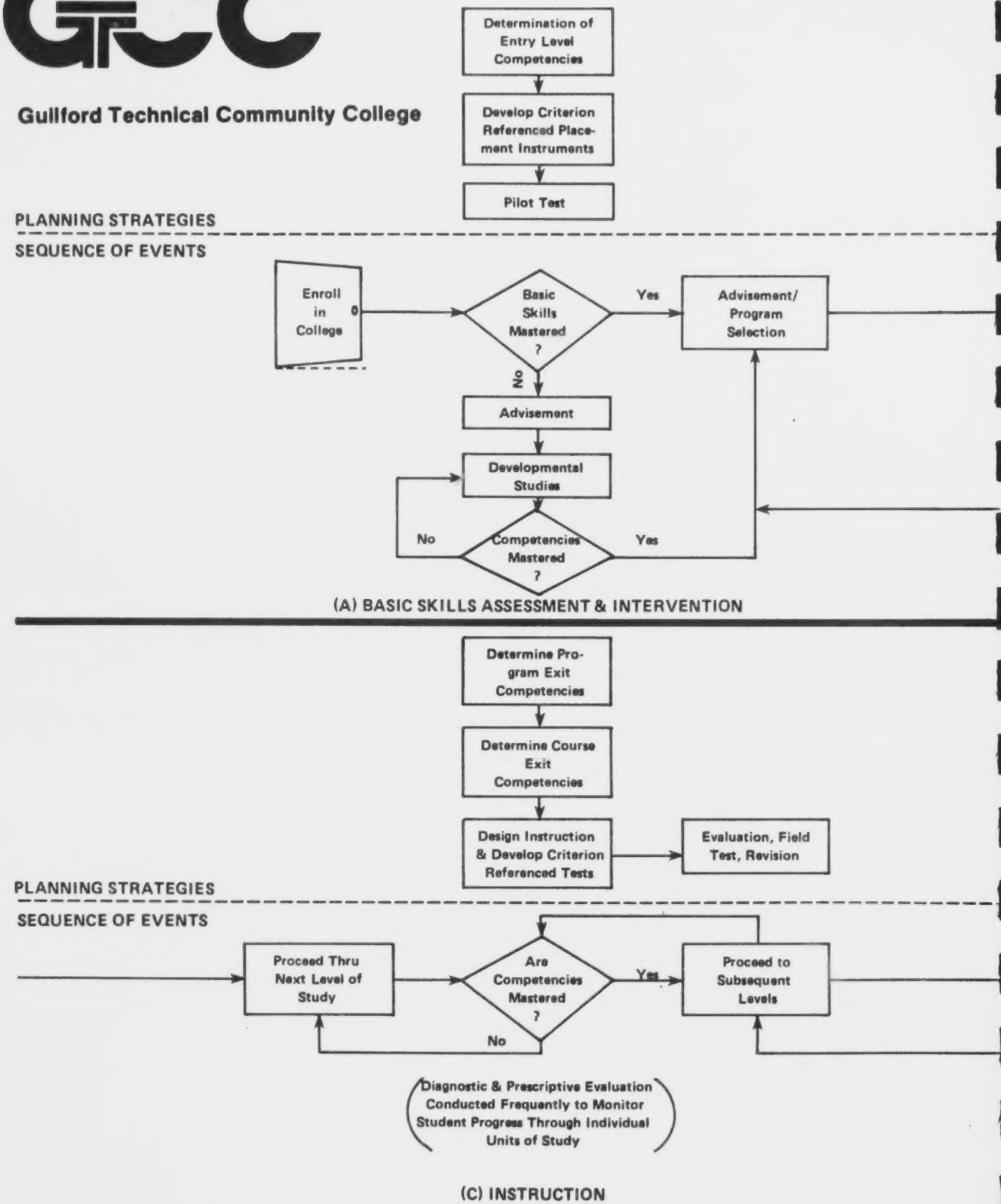
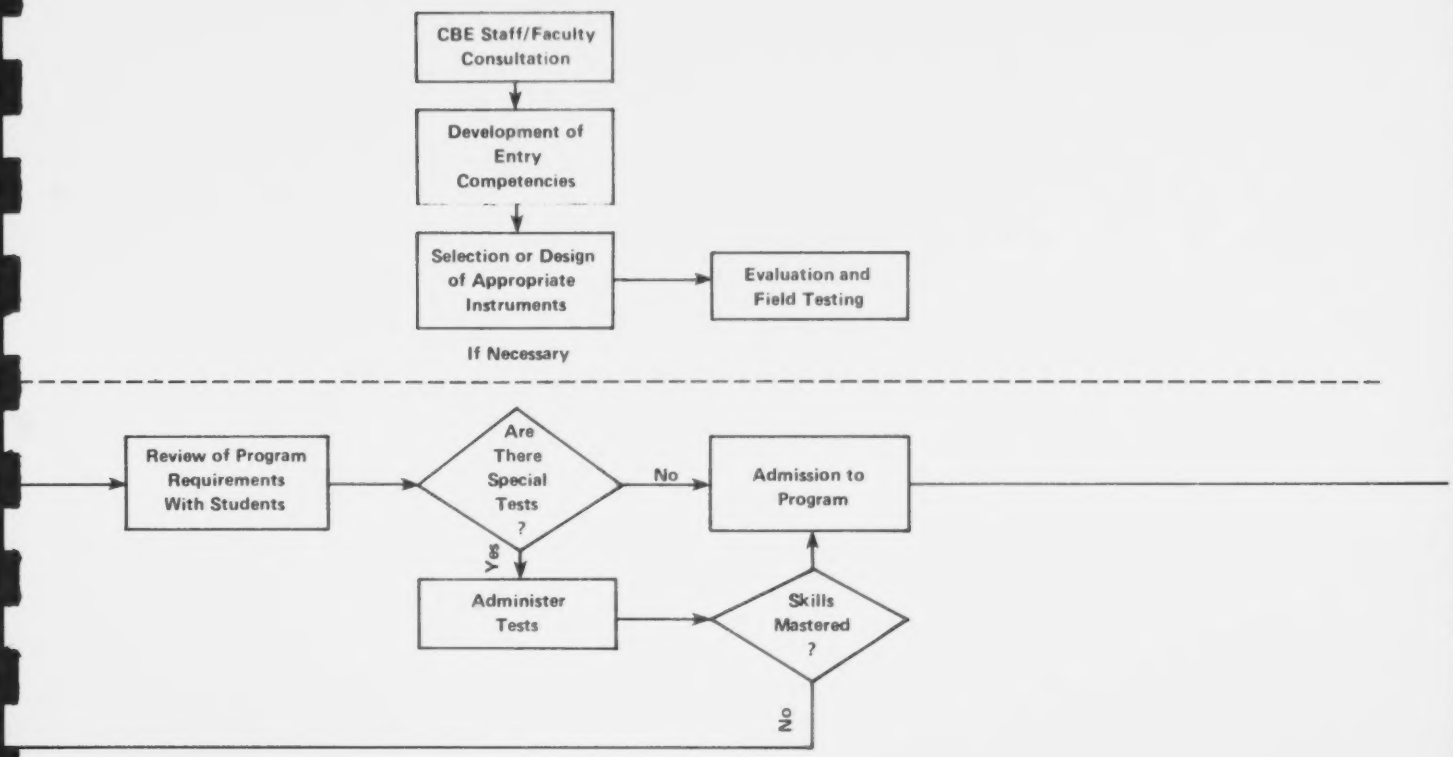
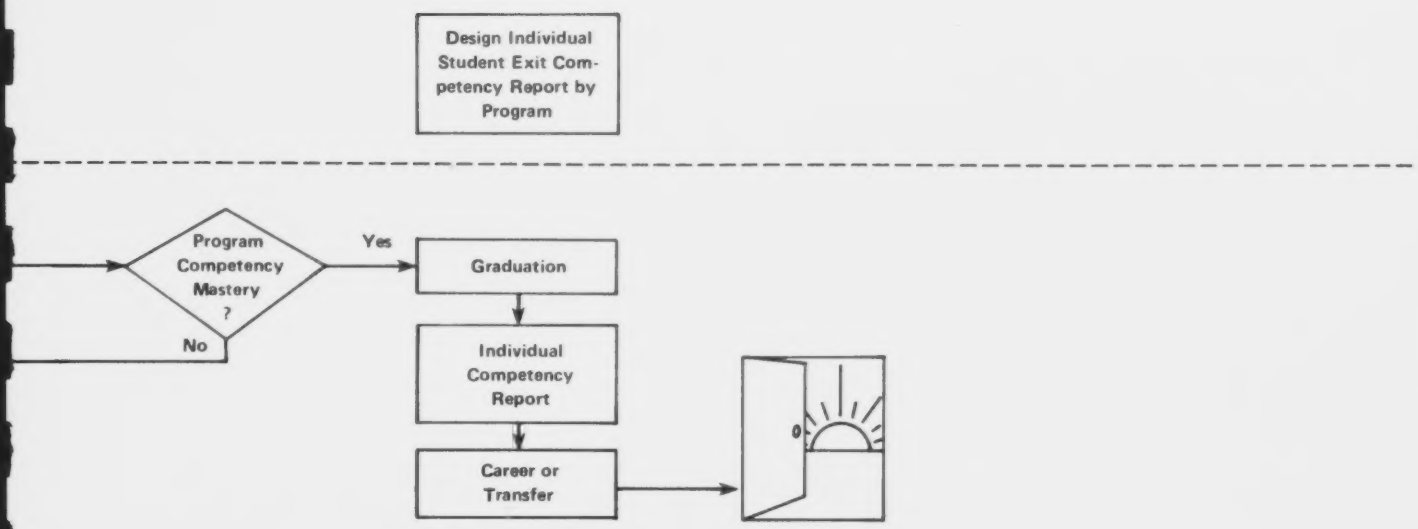


Figure 1. GTCC competency-based assessment model



(B) PROGRAM ENTRY



(D) EXIT & EVALUATION

ASSOCIATE DEGREE STUDENT: To promote his/her success

In an associate degree program, the student should be able to

GENERAL AREAS OF COMPETENCE

A. APPLY BASIC READING SKILLS*	A-1 Comprehend instructional material (e.g., texts, charts, graphs, drawings)	A-2 Demonstrate a knowledge of basic vocabulary	A-3 Use context clues	A-4 Identify main idea(s)	A-5 Identify secondary and/or supporting ideas
B. APPLY BASIC GRAMMATICAL PRINCIPLES OF WRITTEN ENGLISH*	B-1 Apply principles of standard English usage	B-2 Spell common words correctly	B-3 Use capitalization correctly	B-4 Use punctuation correctly	B-5 Use proper verb tenses
C. APPLY BASIC WRITING SKILLS*	C-1 Use standard resource materials (e.g., dictionary)	C-2 Spell correctly	C-3 Make appropriate word choices	C-4 Express ideas clearly and coherently	C-5 Write complete sentences
D. APPLY BASIC MATH SKILLS*	D-1 Add whole numbers, fractions, and decimals	D-2 Subtract whole numbers, fractions, and decimals	D-3 Multiply whole numbers, fractions, and decimals	D-4 Divide whole numbers, fractions, and decimals	D-5 Convert fractions, decimals, percentages, and whole numbers
E. APPLY BASIC LIFE SKILLS	E-1 Communicate effectively with college personnel	E-2 Express ideas orally in an understandable manner	E-3 Abide by institutional rules and policies (ex. attendance)	E-4 Assume responsibility as required by curriculum	E-5 Listen actively
	E-12 Make decisions	E-13 Interact with others as required by curriculum	E-14 Abide by safety rules pertaining to self and others as required by curriculum		

GTCC

DACUM PROJECT SPONSORED BY

April 10 and 11, 1985
Guilford Technical Community College

Paula Garber, DACUM Facilitator/Recorder
Cheryl Wood, DACUM Facilitator/Recorder

* At minimum level established by curriculum
** These skills may be required by some curricula

Figure 2. GTCC entry-level competencies list

A-6 Identify main concept(s)	A-7 Distinguish fact from opinion	A-8 Distinguish literal and figurative language	A-9 Draw inferences	A-10 Paraphrase reading material	A-11 Interpret and apply information
B-6 Use appropriate subject/verb agreement	B-7 Use appropriate pronoun/antecedent agreement	B-8 Demonstrate a knowledge of basic sentence construction			
C-6 Write unified paragraphs	C-7** Write multi-paragraph essays	C-8** Combine ideas using a variety of sentence structures			
D-6 Interpret and solve math problems (ex. word problems, charts, etc.)	D-7** Solve linear equations	D-8** Manipulate algebraic expressions	D-9** Write an algebraic expression	D-10** Use exponential expressions (i.e. fractional and whole exponents)	
E-6 Follow directions	E-7 Manage time	E-8 Study effectively	E-9 Complete assignments on time and legibly	E-10 Analyze and integrate ideas and information	E-11 Apply logical processes(s) to problem solving

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The matrix of competencies in figure 2 represents the campus consensus of exactly what skills GTCC students should have when entering GTCC programs. Assessment of incoming students addresses basic reading, grammar, writing, and math skills, as well as life skills that the panel of instructors felt were crucial for students to be successful in college-level study.

Unfortunately, life skills are extremely difficult to measure. No tests exist that assess, for example, whether a student can be on time for classes, yet faculty members want instruments to measure and ensure such skills. GTCC's assessment staff deal with the problem by sharing the life skills list with incoming students and stressing how important competency in these areas is for success in college programs.

GTCC uses standardized tests developed by the Educational Testing Service to measure the entry-level academic skills of reading, grammar, writing, and math. These commercially available tests come close to measuring the specific competencies developed by the DACUM panel. Ultimately, though, GTCC assessment staff hope to develop in-house criterion-referenced instruments that will measure even more specifically the identified competencies.

GTCC has developed a number of time-tested policies and procedures for its entry-level assessment program that may be generalizable to assessment programs at other community, junior, or technical colleges. For example, all students enrolling in a 2-year program at GTCC are required to go through the entry-level assessment. Students entering apprenticeship training are also required to take the assessment tests. Special students taking only a course here or there are still required to take the entry-level assessment test(s) pertinent to the courses they are taking. Assessment is waived in only a few instances, such as for nonacademic or nontechnical courses (e.g., racquetball).

A number of printed materials have been prepared for students entering GTCC's assessment process. All applicants to GTCC receive a brochure, for example, that explains the assessment requirement and process. The brochure, which is also distributed widely throughout the college's service area, is worded to downplay any threat that potential students may feel about the testing. The average age of incoming students is 27, and most have been away from school for quite some time. Another way GTCC seeks to alleviate test anxiety is by providing one-to-one counseling in the assessment program office.

Students make appointments in the admissions office to take the assessment tests. Testing is free. Currently, GTCC administers the test to groups, but when the new testing center is completed, the assessment staff hope to offer testing services on an individual walk-in basis, as well. For the moment, group administrations are scheduled frequently to meet student needs.

The GTCC staff score the tests at the time potential students take them. After scoring is complete, the test takers receive a form that lists which courses they are eligible to take, based on the test results. GTCC staff used to give the potential students the exact scores they made on the tests, but this discouraged some students from registering for courses. In addition, exact cutoff scores have not been established for all of the programs (although staff are now gathering data to determine whether cutoff scores and placement or remediation are appropriate for some of the more vocationally oriented courses).

In past years, GTCC would mail the scores and course eligibility information to potential students, who had to wait about 10 days for their results. Now, applicants get the course eligibility list right away. They are also told exactly where to find the admissions office and where to find the

developmental studies department, if developmental courses appear on their course list. This individualized communication, combined with the opportunity for on-the-spot counseling, has proven to be a sound strategy, because many potential students subsequently register for courses.

A fairly high percentage of students—about 70 percent—take at least one developmental course. Some persons have been concerned that the assessment requirement would depress college enrollments by minorities, but the GTCC minority enrollment is now about 25 percent of the student population—the same ratio of minorities in the college's service area. GTCC has no evidence that assessment has a different impact on minority students. Overall, the assessment process has been a part of GTCC since it opened, and it is fairly well engrained in the community, creating little concern or complaint. Some of the procedures and tests have changed, but the testing is taken mostly for granted.

TESTING AT THE MERAMEC CAMPUS OF ST. LOUIS COMMUNITY COLLEGE

by Jack J. Becherer

St. Louis Community College (SLCC) is composed of three campuses, Meramec, Florissant Valley, and Forest Park. Each campus serves a different segment of the St. Louis metropolitan area. The campus whose assessment program will be discussed is the Meramec Campus, which serves approximately 12,000 students annually.

Until 1984, the intake assessment program at Meramec campus made use of students' American College Testing (ACT) scores, Scholastic Achievement Test (SAT) scores, and a few other tests, and used different cutoff scores for each one. This practice had problems. One was that many students' test scores were 5, 6, 7, or more years old. Using such dated test scores for placement met with little success. In addition, the mathematics portions of the standardized tests measured math skills of a much higher order than were appropriate for placement. Most of the incoming students were trying to decide whether to enroll in basic arithmetic or elementary algebra, not advanced math courses.

In 1984, after a great deal of study of the assessment/placement problems, Meramec revamped its intake assessment program. First, assessment at the college was made mandatory for all regular students or part-time students who want to enter an English writing, reading, or math course. In addition, students whose assessment scores show that they are not ready for the college courses are now required to take developmental (i.e., remedial) studies.

At first, some people feared that the mandatory assessment and placement policy would hurt enrollment. In fact, however, enrollment in the college composition course has risen 2 percent since then, even though the total enrollment at the Meramec campus has fallen 5 percent over the same period. The policy seems to be increasing enrollment in the basic skills courses, rather than frightening potential students away from the college.

Meramec uses the Assessment and Placement Services for Community Colleges (APSCC) instrument, which is a College Board test, for reading and writing assessment of incoming students. The APSCC fits the college's needs because it provides separate norms for community college students—something that other instruments do not offer. Meramec's assessment staff feel it is important to have that comparative base for assessments.

For students who score marginally on the APSCC writing test or who are not satisfied with their results on the objective assessment, Meramec assessment staff use an in-house writing sample. English faculty grade the sample, and the assessment staff then use the results to determine the student's best possible placement.

Meramec's mathematics department felt that the math portion of the APSCC was not satisfactory. Instead of using it, the college assessment staff consulted with DeKalb Community College (near Atlanta, Georgia) and adopted DeKalb's math placement instrument. The DeKalb instrument, which was developed through a grant from the National Science Foundation, contains 57 items, 12 on arithmetic and 45 based on algebra.

Unfortunately, after a year of using the DeKalb test, the Meramec assessment staff felt that it was very good in measuring algebra skills but insufficient for measuring basic math skills. The DeKalb test contains many items developed by the Mathematical Association of America, however, and SLCC is a member of that organization. Meramec staff therefore plan to revise the DeKalb math test to meet Meramec's needs.

For potential students interested in taking advanced math courses, and who have above average math skills, Meramec's assessment staff use the Calculus Readiness Test. This instrument, developed by the Mathematical Association of America, is used to place students in precalculus, trigonometry, or calculus courses at the college.

In addition to the tests, a Meramec campus counseling staff of 13 educational advisors and 11 professional counselors examine and assess applicants' high school course work, class rank, any previous college course work, and other available indicators of skill and knowledge levels. This information, along with assessment test scores, is used to determine the most appropriate placement for each potential student.

It should be noted that all of the tests used for assessment were chosen by the faculty of the Meramec English, reading, and mathematics departments. Faculty reviewed a wide variety of assessment tests to find the ones that would best meet the placement needs of incoming Meramec students. Faculty involvement in test selection was critical to the acceptance and success of the revamped assessment process at the college. The assessment staff and the college administration felt that it would be counterproductive to have a testing program that was entirely under the control of student services and in which instructors had little input or sense of ownership.

Of course, effective assessment and placement for entering students must go beyond the task of selecting or developing good instruments. SLCC, in general, and Meramec campus, in particular, approach assessment as the foundation of the instructional process. (Appendix A describes assessment from Meramec's perspective.) The goal of assessment, which may sound simplistic, is to determine student readiness to take a course. But achieving this goal involves a number of vital institutional tasks upon which the efficacy of assessment and placement—and, ultimately, student success—depends.

One of these tasks is to convince students to improve basic skills before attempting advanced course work. To do that, the college has to have mandatory placement and mandatory advising, and it must enforce prerequisites. Even that is not enough. It is equally important to convince applicants of the necessity of taking the developmental courses when their assessment scores indicate they need them. They must be made to realize that, without adequate basic preparation, they are likely to fail in college-level classes.

Many part-time students want to take only one business course or perhaps one history course. When the assessment tests show that their skills are fundamentally weak, they are very disappointed if told they cannot take the desired course until they have completed developmental course work. Depending on the situation, the counseling staff may not require these part-time students to attend developmental studies initially. But the staff will try to convince these students that it is in their best interest to take the developmental courses eventually.

A second institutional task is to offer quality developmental education. Effective developmental education courses will increase the likelihood that a student will be successful in later college-level courses. By itself, assessment will not do this.

A third institutional task is to provide enough instructional support to assist students in overcoming their self-imposed barriers or environmental barriers to success in college courses. Many new students inadvertently create situations that are likely to lead to failure. Often, they have unexpressed fears related to schooling, college, or the like. Some do not have a realistic knowledge of what being a college student entails. Some make poor judgments in their course selections or in the number of courses they take. They may have financial, transportation, or other environmentally related problems. These are some of the reasons that most 2-year colleges lose half of their students between the freshman and sophomore years.

It is important for both the assessment procedures and the instructional support system to create an environment that favors student success. One such element is sensitive and realistic advising. Advisors must consider student workloads and time constraints in addition to the college's perennial need to increase its FTE enrollments. Many students do not have the time or money to attempt even 12 hours of course work. So counseling staff must be sensitive to what is going on in a student's life. Advisors must also be realistic about whether a student is likely to succeed if assessment scores are very low or if the student has other significant commitments.

Meramec's Early Alert Program encourages instructors to monitor the progress and attendance of students. Instructors are expected to involve themselves in the process of determining students' success by gauging whether students have problems in their preparations for the classes, their study skills, and/or their motivation and work ethic. Early Alert, a faculty-oriented program, places the responsibility on instructors to confront students who are not prepared or who show deficiencies in one or more of these areas.

Meramec provides numerous other forms of instructional support for entering and continuing students. These include learning laboratories, tutoring programs to supplement instruction, honors programs to promote excellence, and the like. For students who are not successful, a probation or suspension system promotes accountability.

The fourth institutional task at Meramec that relates to intake assessment and placement is systematic evaluation of the elements of all of the college's preparatory systems. This includes evaluating the appropriateness of the tools used to assess students, the validity of the cutoff scores used to place students, and the quality of the college's developmental course work. It would be a mistake to create an assessment process, develop placement guidelines, and let it go at that. The system at Meramec was designed to be evaluated and revised on a continuous basis, at least for the next few years.

Increasing the accountability of the assessment program at Meramec revolves around the objectives of assessment and placement at the college. There are two overlapping objectives. One is to place students into the most advanced course they have the potential to pass. That is, if a student does not need to take a developmental course to pass a college-level course, such as English composition, Meramec advisors would not want to place that student in a developmental course. The second objective is to minimize the number of students placed into courses for which they lack sufficient skills to pass.

There are two objectives because there are two possible errors that can be made in placing students. Advisors can be wrong in two ways and right in only one. The first mistake would be to place a student in an unnecessary class. The second mistake would be to place a student in a class that the student could not master. Frequently, faculty and advisors are primarily interested in avoiding the second error—placing a student in a course that the student cannot master. But many faculty and advisors are willing to take a chance of committing the first error—placing a student in

an unnecessary course. The mentality behind this seems to be, "Okay, maybe Tom could make it in college composition with a C or a B, but it certainly wouldn't hurt him to spend one semester in developmental education." Advisors and faculty need to be very aware that, when dealing with students' valuable resources of time and money, it is important to minimize both errors.

To do this, SLCC at Meramec uses a number of techniques to make the assessment program accountable and visible. First, Meramec has developed college-based norms for each of its placement tests, and it updates these norms every semester. Assessment staff score the tests on a computer using a Scantron and a BASIC language computer package. Student scores are recorded on a floppy disk, where data can be accessed to produce monthly score charts of who is tested and what the scores are. This provides a monthly account of assessment activities and score ranges. By using these data to develop frequency distributions on a month-by-month basis, assessment staff create the resources needed to monitor the assessment program on a continuous basis.

Norming the tests on a semester-by-semester basis takes 1-2 days of staff time, but the advantages are considerable. When Meramec first adopted the APSCC reading test, staff used the APSCC national norms to determine the college's cutoff score, because they needed to have some point from which to begin placement. Staff knew that about 35 percent of the new Meramec students were starting off with a developmental reading course, so staff used the percentages on the national norm to determine placement or initial cutoff scores. The assumption was that the incoming student norms at Meramec would parallel the national norms. But when the national norms were used that year, 12 percent more of the incoming students scored above the cutoff point than were anticipated. This resulted in placing only 23 percent of the students into developmental reading and having to eliminate quite a few of the anticipated 15 selections of precollege reading.

This turned out to be a mistake. Quite a few of the students who scored above the national norm cutoff point should have been placed in developmental reading courses. And among those who had been placed in the reading courses, quite a few had been placed in reading levels higher than they should have been (e.g., placed in an advanced instead of a moderate-level reading course). If staff had had the opportunity to develop local norms earlier and to match the APSCC reading test national norms to the local norms, these problems could have been avoided.

There are other advantages to establishing and keeping local norms up to date. For example, students find it interesting to be able to compare one set of norms with another (national with local) or to compare their own performance with the college student body in general. Making this information available to students often operates as an effective selling tool for placing students in developmental studies courses.

A second technique used at Meramec to promote accountability is sending monthly reports around campus. The report lists all honors students and is sent to the honors students themselves and to the honors coordinator. The same list goes to the college liberal arts program coordinator, who recruits from it, thereby enrolling more students in liberal arts.

The assessment data collection procedures give Meramec the potential to identify any chosen group and monitor that group's progress through college. For example, Meramec assessment staff are currently conducting an exhaustive study on students whose scores showed that they required developmental reading. The study is monitoring the progress of the students who were advised to take the reading course, in order to find out whether or not they have indeed taken reading, and what grades the students earn over a year's time. Using this computerized assessment data gathering system, it is easy to identify and monitor academically high-risk populations or any other population.

A third accountability technique used at Meramec is publishing a testing/placement profile of the entire student body. This profile is sent to every member of the campus community. It is also sent to the members of the board of trustees.

The profile shows who the Meramec students are and where they are being placed. It also indicates the number of assessment tests given, the number of students scheduled for testing, the number of students completing the tests, and the no-show rate. For example, in 1985-86, Meramec staff assessed 3,570 students in writing. Of these, 19 percent qualified for honors courses, using criteria established by the honors coordinator; 68.5 percent were placed in college-level English composition; and about 32 percent started off in developmental writing. The results of the reading assessment differed significantly from those originally anticipated in that assessment staff formerly believed that 76 percent of the incoming students could attempt college-level courses without any reading assessment at all.

Publishing a placement/testing profile enables the college to serve its students better. For example, 72 percent of incoming Meramec students are placed into either basic arithmetic or elementary algebra. The profile clearly indicates that only one in every five incoming students can go directly into a college program without any developmental education. This kind of information is very effective in communicating with administrators and with boards of trustees responsible for planning for overall campus needs.

A final accountability technique is cooperative or collaborative research projects involving both assessment staff and instructional staff. Because placement is part of the instructional process, Meramec assessment staff work primarily with instructional staff, even though they report to the dean of student services. Placement staff and instructional staff are working together to evaluate the appropriateness of the cutoff placement scores for reading and have used some exit testing to assess the effectiveness of college algebra placements. Placement staff and department heads work together on a year-by-year basis to develop the priorities for this kind of collaborative research.

Of course, assessment is not an end in itself. The best possible assessment program will still fail to meet student needs if the support system and developmental education courses are poor. Quality in all three areas is vital; anything less is a waste of time and money. The placement that follows assessment and the quality of training in that placement make the difference between an effective and an ineffective assessment program.

FLORIDA'S STATEWIDE MANDATE TO TEST NEW STUDENTS

by Luther B. Christofoll

Florida Community College at Jacksonville (FCCJ) is a multi-campus urban community college with a service area of two counties whose populations total about 800,000 people. The four campuses are roughly similar in size. Unlike the two colleges reported earlier in this monograph, FCCJ's assessment program for incoming students responds to a statewide mandate for assessment and placement of all new students in state postsecondary institutions. The state has twenty-eight 2-year colleges and nine state universities affected by this mandate.

Mandated assessment of college students did not start with students coming into 2- or 4-year colleges. Instead, it started with students moving from their sophomore (grade 14) to junior (grade 15) college year, whether they were simply moving up a grade in a 4-year university or were transferring to a university from a 2-year institution.

Several years ago, the state of Florida defined a set of skills that were originally called "essential skills" but are now called college-level academic skills. These consist of 112 competencies in the areas of computation and communications, all of which are considered basic for success in the completion of a 4-year degree. All students who complete their college sophomore year and wish to continue their education as a junior must pass a test evaluating these 112 competencies.

This test, the College Level Academic Skills Test (CLAST), is given three times a year at FCCJ (and other Florida colleges) and takes 4 hours to complete. CLAST consists of a math exam, a reading exam, a grammar and usage exam, and a written essay. Students must attain a state-mandated minimum score to pass. Those who fail one or more parts of the test may take those parts over, but they must ultimately pass all four parts of the CLAST to be allowed to receive the associate of arts degree or transfer to the junior level.

Two years ago, when the use of CLAST became mandatory, students could pass the test with fairly low scores. In August 1986, however, the cutoff scores rose considerably, and by 1989 they will be quite high. The CLAST is not easy. In fact, the math subtest is quite difficult and includes competencies in statistics, probability, and some computer science concepts. Many of the students who take CLAST have not had any algebra and naturally do not do well on the test. Fortunately, the test is reasonably broadbased, and the required performance level is not yet terribly difficult. Before August 1986, about 90 percent of the students taking the CLAST eventually passed all four parts.

The rising cutoff scores will bring problems, however. Currently, about 50-60 percent of the minority students eventually pass, but it is feared that this percentage will drop as the required scores go up. All schools below grade 15 will have to do a much better job of preparing students for senior college, or a majority of the students in all groups will probably fail the CLAST by 1989.

So far, there have been remarkably few lawsuits and little public turmoil over the use of the CLAST. Many thought it would become a major issue in the community and around the state, but it has not become one. Of course, up to now, most students have passed the test. The issue may yet grow a few years down the line.

The CLAST was only the first step of the mandated statewide assessment program in place at FCCJ and other Florida 2-year colleges. The state legislature recently defined remedial or developmental education and renamed it college preparatory instruction. It then mandated testing and placement for such instruction. (The state now also funds college preparatory instruction but on a slightly different basis than the funding for regular college instruction.) Appendix B contains the state board of education rule that mandates this testing and placement.

Under the new mandate, every state postsecondary institution must use one of four sets of specified tests to assess and place entering students. The tests are the American College Testing (ACT) Assessment from the American College Testing Program, Assessment of Skills for Successful Entry and Testing (ASSET) from the American College Testing Program, the Scholastic Achievement Test (SAT) from the College Entrance Examination Board, and the Multiple Assessment Program and Services (MAPS) from the College Entrance Examination Board. In addition, the institutions must implement the cutoff scores mandated by the state whenever placing students above the college preparatory level. Finally, college preparatory instruction no longer counts toward a college degree—a change in policy for FCCJ, as well as a number of other colleges.

FCCJ had a long history of placement testing and developmental education programs before the new mandate. The statewide system establishes basic parameters for all colleges, but within those parameters, each college is free to implement its own program. Appendix B contains a summary of the rules and procedures used for assessment and placement of entering students at FCCJ.

Of the four tests specified for use by the new state rule, FCCJ chose to use Florida MAPS, a version of MAPS that was tailored to match competencies to those in the CLAST. Eighteen of the 28 state 2-year colleges use Florida MAPS. (The least satisfactory of the four designated tests seems to be the SAT, which was never designed to be used for assessment and placement in college.)

For vocational, noncredit courses, FCCJ uses the Test of Adult Basic Education (TABE) instead of Florida MAPS. TABE gives grade-level scores. The 10th grade-level is considered appropriate for the more technically oriented vocational programs. The state has set different grade levels for the different vocational programs, however. Some of the state-set levels are as low as the seventh grade.

One of the more interesting aspects of the assessment program at FCCJ is its admissions counseling profile. The college's entire registration system is computer-based, enabling registration at all four campuses (the farthest are 22 miles apart) to be coordinated. Entering students are assessed at the time of orientation, and the tests are scored directly by being fed into a Scantron machine linked to the main computer.

Also at this time, the entering students complete admissions counseling profiles, which gather self-reported information about each student's background. That information is likewise fed into the computer. The computer then prints out a basic prescription for the student. The prescription calls either for placement in developmental courses or in higher level (college) courses.

A number of levels exist within the developmental (or college preparatory) area. Similarly, there are several levels in the regular college program, particularly in mathematics. FCCJ assessment staff can use a number of different kinds of information (including an instructor's assessment of the student after 1-2 weeks in class) to move students around until they are in the best possible placement. Students may not be moved out of college preparatory classes, however, until they

attain the minimum cutoff score on the Florida MAPS. (They may retake the test. The assessment staff will administer a different form of the test for a test retake.)

The state evaluates each college's assessment program by examining and analyzing its relevant records. Each college must provide data to prove that is is meeting the state requirements. If a college has not placed a student properly, the state will eliminate funding for that student. Appendix B contains samples of the kinds of documents that FCCJ uses to provide accountability to the state.

When students use a computer terminal at the college to register, the computer controls the proper level of course work for which the student may register. Students are not permitted to register for courses for which they are not eligible. Appropriate records are maintained by the computer to ensure that the state auditors can trace the appropriateness of student placement and subsequent course registration.

FCCJ receives many inquiries about its state-mandated assessment and placement program. Out-of-state colleges seem particularly interested in the use of the CLAST and the workings of the college preparatory instruction program (combined with assessment). FCCJ's college preparatory courses are for potential college credit students—that is, students seeking (1) a 2-year technical degree or certificate or (2) transfer to a 4-year degree program at a university. The TABE testing is a parallel system for placing students in vocational programs that are more than 450 hours in length but are not college credit programs.

To date, FCCJ has not found a strong correlation between the state-mandated placement test results and how well students do in college courses. If success in a course is defined as a grade of A, B, or C, the rough correlation of success and a student's placement is about 0.2 to 0.3—not very good at all. In fact, the Florida MAPS reading test is a better predictor of success in the writing course than are the writing and the grammar and usage tests that are also given.

As expected, many other variables besides a student's scores on Florida MAPS impinge on the student's success. These variables include students' having a family to support, whether the students have the financial resources to go to school full time (or nearly full time), how many hours they may have to work each week, and the like. Considerations such as these make the assessment and placement process a rough-cut one, at best.

A bill currently before the Florida legislature would adopt a specially created statewide test to be administered at the high school at the end of students' senior year (grade 12). This test would replace the four national tests currently in use by the various Florida colleges. Use of this new test would provide the colleges with test scores for all students before they come to college (although there would be an initial backlog of adults who will not have taken the new test in high school).

The new statewide test would be modeled on competencies that underlie the CLAST. This makes more sense than the tests being used at present. The current tests were chosen because they were the closest to testing the CLAST skills areas—the closest matches available at the time.

The approach used by the state to select the instruments and set the cutoff scores for the tests currently in use has come under question. State committees developed the CLAST competencies, which were then distributed to all faculty in the state community colleges and universities to be evaluated. The competencies that became the mandatory skills (and which subsequently governed the competencies in the college-entry assessment tests) were the ones that rose to the top. In other words, those competencies were the ones that faculty—across the board, in all disciplines—

said were important. The same procedure was used to select the four instruments designated for college-entry assessment. Other states that are considering mandating assessment testing for college students would do well to bring in college faculty, instructional administrative staff, and student development staff on the ground floor of the state committees.

The cutoff scores for both the CLAST and the college-entry assessment tests used in Florida were set by the use of sample populations. Pilot testing was done to see what scores correlated with performance over a year in a sample of community colleges and universities in the state. The pilot group included some small rural colleges, some medium-size suburban colleges, and several of the larger urban colleges. Legal counsel in the state department of education advised that colleges should ensure that they give instruction in all of the skills to be measured and that college preparatory instruction should raise the students' skill levels to at least the minimum cutoff level determined by the pilot test.

Unfortunately, it is not possible to ensure all of these requirements. For example, right now FCCJ does not evaluate the listening or speaking skills of entering students, nor do other Florida colleges. The reason is that no one knows how to do that with 20,000 people at the same time on the same Saturday morning all over the state. Yet those skills must be taught. The speech competencies are included in the required competencies because one particular speech instructor on the state committee was adamant that they be included. This is the kind of problem that other states need to understand and avoid.

Florida has come full circle. When I started working in Florida community colleges in the 1960s, a Florida 12th-grade placement test provided computer printout scores for every student in the state who graduated from or attended high school in his or her senior year. The new legislation before the state legislature may reinstitute an updated version of the same practice.

Some political leaders in the state feel that objective test evaluation is the best way to guarantee to the public that the 2- and 4-year colleges are producing quality graduates from quality educational systems. Objective assessment testing and placement will assure the public that taxpayers are getting their money's worth for each educational dollar.

This approach does seem to work. Over the last few years, student performance has risen, particularly on CLAST results. To some degree, people are rising to the expectations. Unfortunately, a considerable number of people, especially minorities, are still falling through the cracks of the system. It is not perfect. But Florida educators are doing their best to make the assessment and placement system as student-oriented and as educationally defensible as possible within the parameters specified under the law.

APPENDIX A

ST. LOUIS COMMUNITY COLLEGE AT MERAMEC
ASSESSMENT AND PLACEMENT PROGRAM

ST. LOUIS COMMUNITY COLLEGE AT MERAMEC
ASSESSMENT AND PLACEMENT PROGRAM

Who is Assessed?

Assessment is mandatory for all regular students and for any unclassified student planning to attempt a writing, reading, or mathematics course.

Is placement into developmental education required?

When indicated, placement into developmental education is mandatory before a student can attempt a course for which the developmental course is a prerequisite.

What tests are used to determine placement?

Assessment includes the following instruments:

1. The reading and writing portion of the *Assessment and Placement Services for Community Colleges* developed by the College Board

2. An arithmetic, elementary, and intermediate algebra placement test developed by DeKalb Community College in conjunction with the National Science Foundation

3. A calculus readiness test developed by the Math Association of America

4. An "in house" writing sample administered when the results of the multiple choice writing test do not clearly indicate placement

In addition, a staff of 13 education advisors and 11 professional counselors assess high school course work, class rank, previous college course work, and other available indicators to determine the most appropriate student placement.

How are placement tests chosen?

Tests and decision scores are determined by writing, reading, and mathematics faculty in consultation with the coordinator of assessment. Faculty involvement in the assessment process increases the relevance of our placement tools while providing continuous feedback on the appropriateness of Meramec's decision scores.

ASSESSMENT:
THE FOUNDATION OF THE INSTRUCTIONAL PROCESS

Goal of Assessment

— To determine a student's "readiness" to attempt college-level work

Institutional Tasks That Surface as a Result of Assessment

Convincing students to improve basic skills prior to attempting more advanced course work:

- — Mandatory placement
- — Mandatory advising
- — Enforcing prerequisites

Offering quality developmental education to increase the likelihood that a student will be academically successful

Providing instructional support to assist students in overcoming self-imposed and environmental barriers to achievement:

- — Sensitive and realistic advisement that considers student workload and time constraints
- — Progress monitoring by instructors
- — Early alert/identification of classroom problems
- — Learning laboratories and tutoring to supplement instruction
- — Honors programs to promote excellence
- — Academic probation/suspension system to develop student responsibility and accountability

Evaluating the critical elements of the college preparatory system to include the following:

- — The appropriateness of the tools used to assess students
- — The validity of decision scores used to place students
- — The quality of the developmental course work

Assessment is not an end in itself. Accurate assessment without careful advising, meaningful developmental education, and comprehensive instructional support is a waste of personnel and resources.

TECHNIQUES TO INCREASE THE ACCOUNTABILITY OF AN ASSESSMENT PROGRAM

Objectives of Assessment and Placement

1. To place students into the most advanced course that they have the potential to pass
2. To minimize the possibility of placing students into courses for which they do not have the cognitive skills necessary to succeed

Each objective attempts to minimize one of the **two types of errors** possible when placing students:

1. To place students into unnecessary courses
2. To place students into courses that cannot be mastered

An accountable assessment program will most effectively meet the objectives noted above. The following items suggest ways to **increase the accountability of assessment**:

1. Developing college-based norms for placement tests and updating these norms every semester
2. Preparing monthly reports describing the results of assessment and the recommendations for placement
   - — Monthly reports can be developed to define various student groups, such as—
     - potential honors students,
     - students requiring developmental reading,
     - academically high-risk populations
3. Publishing a placement testing profile of your student body and distributing this profile to the college community
4. Conducting research evaluating the effectiveness of the placement process
5. Systematically reviewing the process of placing students. This review should take place annually, and faculty input should be solicited.

APPENDIX B

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE ENTRY ASSESSMENT AND PLACEMENT SYSTEM FOR COLLEGE CREDIT STUDENTS

FLORIDA BOARD OF EDUCATION
COLLEGE PREPARATORY TESTING, PLACEMENT, AND INSTRUCTION MANDATE

6A-10.315 College Preparatory Testing, Placement, and Instruction.

(1) First-time-in-college applicants for admission to community colleges and universities who intend to enter degree programs shall be tested prior to the completion of registration, using one (1) or more of the tests listed herein, and, effective the 1985 fall term, shall enroll in college preparatory communication and computation instruction if the test scores are below those listed herein.

(a) ACT Assessment, American College Testing Program

Reading	14	Composite Standard Score
Writing	14	English Usage Standard Score
Mathematics	13	Mathematics Usage Standard Score

(b) ASSET, American College Testing Program

Reading	22	Raw Score
Writing	43	Raw Score
Mathematics	12	Elementary Algebra Raw Score

(c) MAPS, College Entrance Examination Board

Reading	12	Scaled Score
Writing	30	Test of Standard Written English Scaled Score
Mathematics	206	Elementary Algebra Scaled Score

(d) SAT, College Entrance Examination Board

Reading	340	Verbal Standard Score
Writing	30	Test of Standard Written English Scaled Score
Mathematics	400	Mathematics Standard Score

(2) Nothing provided in Rule 6A-10.315(1), FAC, shall be construed to prevent the enrollment of a student in college preparatory instruction if the community college or university determines that such enrollment would enhance the student's opportunity for future academic success. The determination of enrollment would be made after counseling with the student and the analysis and consideration of other assessment techniques and measurements, which may include transcripts, grade evaluations, diagnostic, placement, or psychological instruments, or other proven indicators or predictors of academic performance. This subsection (2) will expire on December 31, 1985.

(3) Dual enrollment students under Rule 6A-10.241, FAC, may be exempted from the testing.

(4) Students whose first language is not English may be placed in college preparatory instruction prior to the testing required herein, if such instruction is otherwise demonstrated as being necessary. Such students shall not be exempted from the testing required herein.

(5) Test modifications and exemptions in Rule 6A-10.311(4), FAC, shall apply in the case of applicants with records of physiological disorders.

(6) Institutions affected by this rule shall accept test scores on any one of the tests identified in Rule 6A-10.315(1), FAC. Individual student scores shall be valid for three (3) years.

(7) During their first term, full-time students who are registered for at least twelve (12) credits shall begin competency-based preparatory instruction based on the placement test results. Part-time students shall enroll prior to completing twelve (12) credits.

(8) Students shall not enroll for more than three (3) semesters in each skill area to complete college preparatory instruction. Students enrolled in English as a second language may be exempted from this limitation based on a plan submitted by the institution and approved by the Board of Regents or the State Board of Community Colleges for their respective institutions.

(9) Uniform standards for completion of competency-based college preparatory instruction shall correspond to those listed herein for placement in college credit instruction. Once competence has been certified, other public community colleges and universities shall accept the certification upon student transfer. Competence shall be certified upon—

(a) successful completion of courses in which the competencies specified in rule 6A-10.33 (1) (c) 1., FAC, are taught;

(b) passing a criterion-referenced assessment which tests the competencies specified in Rule 6A-10.33 (1) (c) 1., FAC; or

(c) achieving the scores in Rule 6A-10.315 (1), FAC, on the tests listed, or the comparable scores on a validated, analogous norm-referenced test(s).

(10) Students enrolled in college preparatory instruction shall be permitted to take courses concurrently in other curriculum areas for which they are qualified.

(11) The Commissioner shall report to the State Board of Education by November 30 each year the results of the common placement testing.

Specific Authority 229.053 (1), 228.072 (7) (f) FS. Law Implemented 228.072 (7) (f), 240.11 FS. History - New 7-15-84, Amended 6-6-85.

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE
ASSESSMENT AND PLACEMENT SYSTEM
FOR COLLEGE CREDIT STUDENTS

Summary

Florida Community College at Jacksonville (FCCJ), a multi-campus urban community college, has over the past several years evolved a computer-based entry assessment and placement system. Based upon a battery of state-prescribed assessment tests (Florida MAPS) and a student self-reported Admission Counseling Profile, the system places students in the appropriate level of mathematics, English, composition, and reading. Placement in these three basic skills areas is based upon statewide cut-off scores and is implemented through the online registration system. The Admission Counseling Profile (APC) incorporates personal background data reported by the student. These data are entered into the student's record and are available to the program advisor for course and program advising and placement.

All test answer sheets and admission profile questionnaires are input on each campus via a Scantron optical reader that is interactive with the central registration computer (IBM 4881). Immediate printouts of placement recommendations are available for advising purposes. Placement recommendations are automatically entered into the student's academic record and control the courses for which the student may register.

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE
ASSESSMENT AND PLACEMENT POLICIES AND PROCEDURES

Entry Placement Policies

The following administrative policies have been approved and are effective for fall term, 1985-86.

Entry Placement Testing for College Credit Students

General

Entry Assessment shall be provided for all degree-seeking entering students and for any college credit students who plan to take English, mathematics, or reading. Students shall be placed in reading, mathematics, and English courses in accordance with State statutes or, when not specified in statutes, in accordance with college established policy. (07/02/85)

Responsibility

Student Developmental Services at each campus shall be responsible for testing and advising entering students in accordance with established guidelines. (07/02/85)

Test Selection and Cut-off Scores

Recommendations on entry placement, including test selection, cut-off scores, and related matters, shall be made by the Director of Testing to the Student Affairs Administrative Coordinating Council and the Instructional Affairs Administrative Coordinating Council, which shall decide such matters jointly. (07/02/85)

Entry Placement Handbook

The Director of Testing shall be responsible for maintaining an **Entry Placement Handbook**, which will contain adopted policies and established procedures regarding entry placement. The handbook will be approved, both initially and as updated, by the Student Affairs Administrative Coordinating Council and the Instructional Affairs Administrative Coordinating Council jointly. (07/02/85)

Entry Placement Testing Procedures

Whom to Test

FCCJ administers the Florida MAPS as the entry placement tests to all degree-seeking entering students and for any college credit students who plan to take English, mathematics, or reading. Transfer students who have not been tested at another school and plan to register for entry-level math, English, or reading courses will also need to be tested. Transfer students will be allowed to register even though the transcript has not been received.

Students will be allowed to transfer entry placement scores on the four approved state entry placement tests. (See section on "Students with Scores on Approved Tests" elsewhere in this appendix.)

Transfer students should be coded as "99's" via ACP on the 50 screen to allow them to proceed through the entry placement process.

Procedures for Administering Florida MAPS

Form A of the Florida MAPS will be administered during the regularly scheduled orientation testing. Directions for the test are correct as printed in the booklet. The correction for guessing factor has been eliminated on all subtests except the Test of Standard Written English.

The cut-off scores approved by the State are lower than the scores previously in effect at FCCJ. Par ranges (except on the Arithmetic Skills subtest) have been eliminated due to the fact that FCCJ must abide strictly to the cut-offs established by the State for college preparatory courses.

The testing session should last approximately 3 hours. This includes an introduction to the orientation process and the completion of the Admission Counseling Profile (ACP).

Actual testing time is 2 hours. Each student will be given four 30-minute tests. Persons administering the Florida MAPS should do the following:

1. Give the Elementary Algebra subtest. This test will be used as a locator test to see if students should be placed in college preparatory courses or in college-level courses.

2. The Reading test and the Test of Standard Written English (TSWE) should be administered while the Elementary Algebra subtest is being graded.

3. After the Reading and TSWE subtests, examiners will advise students to take either the Arithmetic Skills subtest (score of 0-13 on Elementary Algebra subtest) or the Intermediate Algebra subtest (14+ on Elementary Algebra subtest). The Intermediate Algebra subtest is a separate booklet. Examiners should devise a system to administer both tests during the same 30-minute time period without making an issue of which group is the more or less advanced. Directions in the Florida MAPS booklet for the Arithmetic Skills subtest may be read and used for administering both subtests.

Students will be placed in courses according to the cut-off scores on the following page. These scores apply only to Form A of the Florida MAPS.

FLORIDA MAPS CUTOFF SCORES - FORM A

Test	Score Range	Course Placement
Test of Standard Written English	0 - 18	ENC 0002
	19+	ENC 1101
Reading	0 - 26	REA 0305 (REA 0010)
	27 - 34	REA 1105 (AA only)
	35 - 40	REA 1205 (Elective)
	41+	Exemption
Arithmetic Skills	0 - 19	MAT 0003
	20 - 21	PAR
	22+	MAT 0024
Elementary Algebra	0 - 13	Look at Arithmetic Skills subtest for placement into C.P. courses.
	14+	Look at Intermediate Algebra subtest for placement into higher level math scores.
Intermediate Algebra	0 - 13	MAT 1033
	14+	MAT 1104/MGF 1204

Special Advising Considerations:

All students who test and are placed in college preparatory-level courses are required to take these courses. AA students are required to take REA 1105 if testing places them in this course. AS students are not required to take this course; however, the counselor should encourage the taking of this course.

Also, students who score in the higher range on the Intermediate Algebra subtest should be given special consideration for advisement into higher level math courses. The advising sheet will only print MAC 1104 and MGF 1204. Some students may, however, qualify to take trigonometry and calculus if the proper prerequisites have been taken in high school. Dean's approval is needed for placement in these instances.

College Preparatory Instruction

According to State Board Rule 6A-10.241, "During their first term, full-time students who are registered for at least twelve (12) credits shall begin competency-based preparatory instruction based on the placement test results. Part-time students shall enroll prior to completing twelve (12) credits."

Thus, counselors and advisors need to schedule students into college preparatory courses as the SBE rule stipulates. Full-time students whose test results place them into college prep math, reading, and English should be advised to take these courses during their first term. College prep English and reading are not considered corequisites and may be taken in any order in accordance with placement test results. Rule 6A-10 states that "students enrolled in college preparatory instruction shall be permitted to take courses concurrently in other curriculum areas for which they are qualified."

Exceptions to Testing Policy

NonDegree with Associate Degree or Higher

Those students are are nondegree seeking and who have an associate degree or higher will be given the option of taking the entry placement test. Students who choose not to test need to be coded in the computer as "99's" on the 50 screen in order to allow them to proceed through the registration process. This will need to be done by advisors, counselors, or other designated staff member. This aspect will not be programmed.

Students with Scores on Other Approved Tests

Effective fall term, 1985, FCCJ must accept scores on all four approved entry placement tests upon the student's request *and presentation of scores*. This rule applies to first-time entering students as well as transfer students. Besides the Florida MAPS, the other state-approved tests are the ACT, ASSET, and the SAT. A programming request has been submitted whereby these entry placement scores can be entered to the student record. However, until such time when programming is completed, the counselor will need to handle these students on an individual basis. These students will need to be coded as "77's" on the 50 screen and the proper courses entered for these students.

On the following page is a listing of the course placement for the other approved state entry placement tests. Please note that students who present these scores may still be required to test in some areas. Example: An AA student who places in the college-level range in reading on the ACT will need to be tested in reading to see if he or she needs to take 1105. AS students will not need to be tested. Also, the scores for math will show if a student needs to take the Arithmetic Skills test for placement in one or two college preparatory courses or to be tested in Intermediate Algebra for placement into college-level math courses. The English scores on these other tests will exempt students from taking another test and can automatically place them into college-level (ENC 1101) or college prep (ENC 0002) courses.

IMPORTANT: Please keep copies of all scores on ACT, SAT, and ASSET accepted from the student(s) and submit them to the Testing Office at the end of the entry placement process for the term.

APPROVED CUTOFF SCORES FOR ACT, ASSET, AND SAT

Test	Score Range	Course Placement
ACT		
Reading (Composite Standard Score)	0 - 13 14+	REA 0305 (REA 0010) AS - Exempt AA - Test in Reading
Writing (English Usage Standard Score)	0 - 13 14+	ENC 0002 ENC 1101
Mathematics (Math Usage Standard Score)	0 - 12 13+	Arithmetic Skills Test Intermediate Algebra Test
	. . . . .	
SAT		
Reading (Verbal Standard Score)	0 - 339 340+	REA 0305 (REA 0010) AS - Exempt AA - Test in Reading
Writing (TSWE)	0 29 30+	ENC 0002 ENC 1101
Mathematics (Math Standard Score)	0 - 399 400+	Arithmetic Skills Test Intermediate Algebra Test
	. . . . .	
ASSET		
Reading (Raw Score)	0 - 21 22+	REA 0305 (REA 0010) AS - Exempt AA - Test in Reading
Writing (Raw Score)	0 - 42 42+	ENC 0002 ENC 1101
Mathematics (Raw Score)	0 - 11 12+	Arithmetic Skills Test Intermediate Algebra Test

Retest Policy

Students who challenge scores and placement on the Florida MAPS may retest one time using Form B. Form B will also be used in retesting students for level change purposes. (See section on level changes elsewhere in this appendix.)

Conversion from raw score to scale score is slightly different for Form B of the Florida MAPS. The state-approved cut-off is the scaled score. These scores convert to different raw scores for the Reading and Test of Standard Written English tests. It is therefore very important to place students according to the placement on the following page.

Form B may be machine-scored; *however, placement must be entered manually*. In order to properly score Form B on the machine, the examiner must grind in the number "6" on the line that has the test number pregridded. The reading test will be graded by code "126." See sample reading test score sheet.

The pregrid scoring numbers for Form B are as follows:

Reading	126
TSWE	26
Arithmetic Skills	36
Elementary Algebra	146

(Note: Form B for the Intermediate Algebra subtest is not programmed.)

The scanner will grade Form B and place scores to the student's record. However, at this time, it will not be programmed to place students in courses. Instead, it will wipe out the placement for the student for the subject retested. *It is important that the scorer go into the "50" screen and enter proper course placement in accordance to new score. Make certain the placement is entered according to Form B placement cut-offs.* Remember that you must bring up the 52 screen before placement is completed. A programming request to handle automatic placement has been submitted.

FLORIDA MAPS PLACEMENT FOR FORM B

Test	Score Ranges	Course Placement
Test of Standard Written English	0 - 16	ENC 002
	17+	ENC 1101
Reading	0 - 27	REA 0305 (REA 0010)
	28 - 34	REA 1105
	35 - 40	REA 2205
	41+	Exemption

NOTE: Math cut-offs are the same as for Form A.

Arithmetic Skills	0 - 19	MAT 003 (& MAT 0024)
	20 - 21	PAR
	22+	MAT 0024
Elementary Algebra	0 - 13	Look at Arithmetic Skills Test for Placement into C.P. courses.
	14+	MAT 1033
		MAC 1104/MGF 1204

Level Changes to and from College Preparatory Courses

A student may change level only *after* the last day of registration under the following conditions:

1. A student changing from college credit to college preparatory English, reading, or math must be retested using Florida MAPS Form B. (See elsewhere in this appendix for procedures.) Student's retest scores must place him or her in college prep courses.

2. A student changing from college preparatory English, reading, or math to a college-level course must retest using Florida MAPS Form B. (See elsewhere in this appendix for procedures.) Student retest scores must place him or her in college-level courses.

3. The student is then sent back to the instructor with scores to initiate the level change process.

4. Registration staff will process the level change only if the level change card is signed by an Instructional Dean.

5. Students in other classes may change level without retesting. Also, level changes in higher level courses do not require retesting (example: Calculus to Trigonometry).

Note: Students may present scores on other approved state entry placement tests that may exempt them from college preparatory courses. (See elsewhere in this appendix.)

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE
ADMISSION COUNSELING PROFILE

Introduction

Welcome to Florida Community College. The purpose of this survey is to collect some information that will be useful in your academic planning and course placement. You will receive a printout that will summarize your results. This will be used by your counselor during the course selection process.

Instructions

DO NOT make any marks in this booklet. MARK ALL ANSWERS ON THE SEPARATE ANSWER SHEET PROVIDED. Use a #2 pencil and make short dark lines to indicate your answers.

Before beginning, make sure that all the required information is completed on your answer sheet (name, student number, and so forth).

Read each item and select the option of your choice. Mark over this option's letter (beside the item number) on your answer sheet. Refer to the example (labeled IMPORTANT) on the right side of your answer sheet. Items followed by an asterisk (*) indicate that you may mark as many options as apply to you for that item.

For items 5, 6, and 7, please indicate the letter grade to the best of your memory. If you are unable to remember your specific grade, please choose the one that best reflects how you did in that course. Mark "e" for "unsure" if you are unable to choose from among the other options.

High school courses should include grades 9-12.

Important: This profile is *required* for you to be processed through orientation. ANSWER *ALL* QUESTIONS THAT APPLY TO YOU.

Note: This information will be used by college counselors to assist you in areas related to your success in college. Please answer as accurately as possible.

If you have any questions, ask a counselor for assistance.

ADMISSION COUNSELING PROFILE

PART 1

(1) ENROLLMENT PLANS

a. Full-Time Day (12+ credits)
b. Full-Time Evening (12+ credits)
c. Part-Time Day (1-11 credits)
d. Part-Time Evening (1-11 credits)

(2) DEGREE OBJECTIVE

a. Associate in Arts (2-year degree, to transfer to a university)
b. Associate in Science (2-year occupational/technical degree, to get a job)
c. Associate in Applied Science (2-year vocational degree, to get a job)
d. College Credit Certificate (1-year certificate, to get a job)
e. Nondegree.

(3) HIGHEST LEVEL OF FORMAL EDUCATION COMPLETED

a. GED or H.S. Diploma
b. Vocational, Technical, or Business Program
c. Associate Degree
d. Bachelor Degree
e. Graduate or Professional Training

(4) LAST TIME ATTENDED SCHOOL

a. Currently Enrolled
b. Less than 1 Year Ago
c. 1-2 Years Ago
d. 3-5 Years Ago
e. More than 5 Years Ago

(5) HIGH SCHOOL ENGLISH GRADES

a. Mostly A
b. Mostly B
c. Mostly C
d. Below C

(6) HIGH SCHOOL MATH GRADES

a. Mostly A
b. Mostly B
c. Mostly C
d. Below C

(7) HIGH SCHOOL SCIENCE GRADES

a. Mostly A
b. Mostly B
c. Mostly C
d. Below C

(8) HIGH SCHOOL MATH COURSES TAKEN* (may select more than one)

a. Algebra I
b. Algebra II
c. Geometry
d. Trigonometry
e. Calculus

(9) **HIGH SCHOOL SCIENCE COURSES TAKEN*** (may select more than one)

a. Biology
b. Chemistry
c. Physics

(10) **PREVIOUS COLLEGE COURSE WORK*** (may select more than one)

a. None
b. English
c. Reading
d. Math
e. Other

(11) **SELF-ESTIMATED PREPARATION FOR COLLEGE-LEVEL READING**

a. Very Well Prepared
b. Well Prepared
c. Adequately Prepared
d. Need Additional Preparation

(12) **SELF-ESTIMATED PREPARATION FOR COLLEGE-LEVEL ENGLISH**

a. Very Well Prepared
b. Well Prepared
c. Adequately Prepared
d. Need Additional Preparation

(13) **SELF-ESTIMATED PREPARATION FOR COLLEGE-LEVEL MATH**

a. Very Well Prepared
b. Well Prepared
c. Adequately Prepared
d. Need Additional Preparation

(14) **SPECIAL FACTORS** (may select more than one)

a. Advanced Placement Credit
b. CLEP Credit
c. Accelerated High School/Early Admission
d. English As Second Language
e. Other

(15) **VETERANS STATUS**

a. I will receive VA benefits
b. I will not receive VA benefits
c. I am not a veteran

COMPLETED ONLY BY TRANSFER STUDENTS OR STUDENTS TRANSFERRING CLEP

(16) Please indicate which English composition courses you have successfully completed:

(a) I have not taken any English.
(b) I have taken one semester of Freshman English composition (one quarter).
(c) I have taken two semesters of Freshman English composition (two or three quarters).

(17) Please indicate which general or basic college-level math courses you have completed successfully:

(a) I have not taken any general or basic college-level math courses.
(b) I have completed one semester of a basic or general college math course.

(18) Please indicate the highest algebra course you have successfully completed. (Courses start at lowest level to highest level.)

(a) I have not taken any algebra courses.
(b) I have completed introduction (elementary) to algebra.
(c) I have completed intermediate algebra.
(d) I have completed college algebra.

(19) Please indicate any reading courses you have successfully completed.

(a) I have not completed any reading course.
(b) I have completed a precollege or developmental reading course.
(c) I have completed a college-level reading course.

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE

07/09/85

ADMISSIONS COUNSELING PROFILE

PART 1: ACADEMIC HISTORY

138-38-1629

724-3240

ADMISSIONS STATUS: **NDEG**

ENROLLMENT PLANS: **TFD**

CAMPUS: **KC**

DEGREE OBJECTIVE: **AA**

MAJOR_____
TRANSFER
INSTITUTION _____

THE DATA SUMMARIZED BELOW WILL BE USED BY A COUNSELOR TO ASSIST IN COLLEGE PLACEMENT. IT SUMMARIZES YOUR RESPONSES TO THE ACP SURVEY.

LAST ATTENDED SCHOOL: 1-2*

H.S. GRADES— ENGLISH: **C***
MATH: **C***
SCIENCE: **B**

SELF-ESTIMATED PREPAREDNESS:

ENGLISH: **A**
MATH: **A**
READING: **A**

HIGHEST LEVEL OF EDUCATION: HS

PREV. COLLEGE WORK: **NA**
H.S. MATH COURSES: **ALG 1 ALG 2**
H.S. SCIENCE COURSES: **CHEM**
SPECIAL FACTORS: **AP**

COUNSELOR NOTES:

*DEVELOPMENTAL INDICATORS

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE

ADMISSION COUNSELING PROFILE PART 2: COURSE PLACEMENT	263-69-8378 07/17/85 5861-0127

COMMUNICATION: READING SCORE: __ OF 45 ENGLISH SCORE: **16** OF 50	COMPUTATION: ARITHMETIC SCORE: **30** OF 35 ELEMENTARY ALGEBRA SCORE: **12** OF 35

COURSE PLACEMENT RECOMMENDATIONS:

READING COURSE(S)	ENGLISH COURSE(S)	MATH COURSE(S)
	ENC 0002	**MAT 0024**

COUNSELING NOTES

STUDENT MUST BEGIN COLLEGE PREP COURSES WITHIN FIRST 12 HOURS.

READING COURSE(S)	ENGLISH COURSE(S)	MATH COURSE(S)
_____	_____	_____
_____	_____	_____

ADVISOR: _____

FLORIDA COMMUNITY COLLEGE AT JACKSONVILLE
COLLEGEWIDE RESULTS—FLORIDA MAPS
SUMMARY OF ENTRY PLACEMENT TEST SCORES
WINTER TERM, 1986

Winter Term Student Population Tested (N = 1061)

Females		**Males**	
431	White	360	White
135	Black	84	Black
11	Asian or Pacific	9	Other
10	Hispanic	8	Asian or Pacific
3	Am. Indian or Alaskan	7	Hispanic
3	Other	3	Am. Indian or Alaskan
593	= 56%	468	= 44%

Percentage of those tested placed in College Preparatory (remedial) courses (winter term, 1986)

English 32% Reading 17% Math 70%

Percentage placed fall term, 1985

English 27% Reading 23% Math 46%

APPENDIX C

MEMBER INSTITUTIONS OF THE NATIONAL ALLIANCE OF COMMUNITY AND TECHNICAL COLLEGES (1986-87)

MEMBER INSTITUTIONS OF
THE NATIONAL ALLIANCE OF COMMUNITY AND TECHNICAL COLLEGES
(1986-87)

1. Alamo Community College District, San Antonio, Texas
2. Anchorage Community College, Anchorage, Alaska
3. Atlantic Community College, Mays Landing, New Jersey
4. Bergen Community College, Paramus, New Jersey
5. Bessemer State Technical College, Bessemer, Alabama
6. Big Bend Community College, Moses Lake, Washington
7. Boise State University, School of Vocational-Technical Education, Boise, Idaho
8. Brevard Community College, Cocoa, Florida
9. Catawba Valley Technical College, Hickory, North Carolina
10. Catonsville Community College, Catonsville, Maryland
11. Central Arizona College, Coolidge, Arizona
12. Champlain College, Burlington, Vermont
13. City Colleges of Chicago, Chicago, Illinois
14. Clark Technical College, Springfield, Ohio
15. Columbus Technical Institute, Columbus, Ohio
16. Cuyahoga Community College District, Cleveland, Ohio
17. Dallas County Community College District, Dallas, Texas
18. Del Mar College, Corpus Christi, Texas
19. Durham Technical Community College, Durham, North Carolina
20. Eastern Iowa Community College District, Davenport, Iowa
21. Florida Community College at Jacksonville, Jacksonville, Florida
22. Greenville Technical College, Greenville, South Carolina
23. Guilford Technical Community College, Jamestown, North Carolina
24. Hocking Technical College, Nelsonville, Ohio
25. Indiana Vocational Technical College-Wabash Valley Technical Institute, Terre Haute, Indiana
26. Jefferson Technical College, Steubenville, Ohio
27. Lakeland Community College, Mentor, Ohio
28. Lewis-Clark State College, Lewiston, Idaho
29. Manchester Community College, Manchester, Connecticut
30. Mississippi Gulf Coast Junior College, Perkinston, Mississippi
31. Orangeburg-Calhoun Technical College, Orangeburg, South Carolina
32. Owens Technical College, Toledo, Ohio
33. Patrick Henry Community College, Martinsville, Virginia
34. Community College of Rhode Island, Warwick, Rhode Island
35. St. Louis Community College, St. Louis, Missouri
36. Community Colleges of Spokane, Spokane, Washington
37. Tarrant County Junior College, Fort Worth, Texas
38. Triton College, River Grove, Illinois
39. Utah Technical College at Provo, Provo, Utah
40. Walla Walla Community College, Walla Walla, Washington

SELECTED READINGS

Academic Preparation for College: What Students Need to Know and Be Able to Do. New York: The College Board, 1983.

Alverno College Faculty. *Assessment at Alverno College.* Milwaukee, WI: Alverno College, 1979.

Analysis of English Placement Examinations: A Study. San Mateo County Community College District Basic Skills Project. San Mateo, CA: San Mateo Community College District, 1978. (ED 148 424)

Branscomb, Harvie; Milton, Ohmer; Richardson, John; and Spivey, Herman. *The Competent College Student: An Essay on the Objectives and Quality of Higher Education.* Nashville: Tennessee Higher Education Commission, 1977.

Cohen, Arthur M., and Brawer, Florence B. *The American Community College.* San Francisco, CA: Jossey-Bass, 1982.

Cramer, Ray, and Liberty, Susan. *A Plan for Improving Instruction and Services for Developmental Skills Students at Fresno City College.* Fresno, CA: Fresno City College, 1981. (ED 207 656)

Dressel, Paul L. *College and University Curriculum.* Berkeley, CA: McCutchan Publishing Corporation, 1968.

Ewell, Peter. *The Self-Regarding Institution: Information for Excellence.* Boulder, CO: National Center for Higher Education Management Systems, 1984.

Forrest, Aubrey, and Steele, Joe M. *COMP: Defining and Measuring General Education Knowledge and Skills.* Technical Report 1976-81. Iowa City, IA: The American College Testing Program, 1982.

Friedlander, Jack. *Why Don't Poorly Prepared Students Seek Help?* Los Angeles, CA: Center for the Study of Community Colleges, 1981. (ED 203 901)

Hammock, Joseph. "Criterion Measures: Instruction vs. Selection Research." Paper presented to the American Psychological Association, September 1960.

Harris, John. "Baccalaureate Requirements: Attainments or Exposures?" *The Educational Record* 53 (Winter 1972): 59-65.

Hendrick, Larry. *An Integrated Student Diagnosis and Instructional Model: A Supplementary Paper to the Educational Programs Report of the Los Rios Community College District Master Plan.* Sacramento, CA: Los Rios Community College District, 1980. (ED 188 731)

Heywood, John. *Assessment in Higher Education.* New York, NY: John Wiley & Sons, 1977.

Integrity in the College Curriculum: A Report to the Academic Community. Project on Redefining the Meaning and Purpose of Baccalaureate Degrees. Washington, DC: Association of American Colleges, 1985.

Johnson, Jerome A.; and others. *One State's Efforts to get Serious about the High Risk Student: Assessment, Faculty Advising, Career Planning, and Developmental Education in Oregon's Community Colleges.* Salem: Oregon State Department of Education, 1980. (ED 188 732)

Linthicum, Dorothy S. *Dundalk Community College Developmental Education Research Project.* Baltimore, MD: Dundalk Community College, 1980. (ED 206 332)

McKeachie, Wilbert J. *Teaching Tips: A Guidebook for the Beginning College Teacher.* Lexington, MA: D.C. Heath and Company, 1978.

Mentkowski, Marcia; and Loacker, Georgine. "Assessing and Validating the Outcomes of College." In *New Directions for Institutional Research: Assessing Educational Outcomes*, edited by Peter Ewell. San Francisco, CA: Jossey-Bass, n.d.

Milton, Ohmer, and Edgerly, John W. "The Testing and Grading of Students." *Change Magazine*, 1986.

Mingle, James R. *Measuring the Educational Achievements of Undergraduates: State and National Developments.* Denver, CO: State Higher Education Officers, January 1985.

Morris, Lynn Lyons, and Fitz-Gibbo, Carol Taylor *How to Measure Achievement.* Beverly Hills, CA: Sage Publications, 1978.

Moses, Joseph L. "The Assessment Center Method," In *Applying the Assessment Center Method*, edited by J.L. Moses and W.C. Byham. New York, NY: Pergamon Press, 1977.

O'Neill, Joseph P. "The Crisis of Integrity." Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, April 1983.

Pace, C. Robert. *Measuring Outcomes of College.* San Francisco, CA: Jossey-Bass, 1979.

Roueche, John E., and Archer, Patricia F. "Entry Level Assessment in College." *Community College Review* 6, no. 4, (Spring 1979): 15-27.

Roueche, Suanne D., and Comstock, Veronica Nora. *A Report on Theory and Method for the Study of Literacy Development in Community Colleges.* Austin, TX: Department of Educational Administration, 1981. (ED 211 161)

Scannell, Dale B., and Tracy, D.B. *Testing and Measurement in the Classroom.* Boston, MA: Houghton Mifflin, 1975.

Thornton III, George C., and Byham, William C. *Assessment Centers and Managerial Performance.* New York, NY: Academic Press, 1982.

Troutt, William E. "Unbundling Instruction: Opportunity for Community Colleges," *Peabody Journal of Education* 56, no. 4 (July 1979): 253-259.

Wang, William K.S. "The Unbundling of Higher Education." *Duke Law Journal* 53 (1975): 53-90.

Warren, Jonathan. "Meeting the New Demand for Standards." *New Directions in Higher Education* (43) December 1984.

Winter, David G.; McClelland, David C.; and Stewart, Abigail J. *A New Case for the Liberal Arts.* San Francisco, CA: Jossey-Bass, 1982.

REFERENCES

Long, James P., and Warmbrod, Catharine P. *Preparing for High Technology: A Guide for Community Colleges.* Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1981.

Long, James P.; Minugh, Carol J.; and Gordon, Robert A. *How To Phase Out A Program.* Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1983.

Long, James P.; Gordon, Robert A.; Spence, Charles; and Mohr, Gary. *Economic Development and the Community College.* Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1984.

Corwin, Luene; Minnaert, Kenneth J.; Martinez, Jr.; and Lemoine, Maurice. *Evaluating and Revising Programs: A Forum of the National Postsecondary Alliance.* Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1986.